IN THE CLAIMS:

1.   (Currently Amended) A method for use in a wavetable based sound synthesis for which encoded wavetable data is <u>encoded either independently or not with respect to neighborhood frames and is </u>decoded by means of an audio decoder on a frame-by-frame basis, each frame comprising at least one sample, wherein said encoded wavetable data comprises samples in an attack section and samples in a loop section, which samples of said loop section ~~may be reused~~<u>are reuseable</u> for a playback in a loop as often as required, said method comprising:

    a) decoding consecutive frames of said wavetable data starting with a first frame up to a frame which includes a start of said loop section;

    b) saving an internal state of said audio decoder before starting to decode said frame including the start of said loop section<u> wherein interdependence between said neighborhood frames is reflected together with other control information in a number of variables that constitute said internal state of said audio decoder</u>;

    c) decoding subsequently all frames comprising samples of said loop section and providing said decoded frames for further processing for a playback; and

    d) at least if said samples of said loop section are distributed to more than one frame, restoring said internal state of said audio decoder, saved at step b), and continuing with step c) as often as required.

2.   (Original) The method according to claim 1, wherein each decoded frame is stored for said further processing by substituting a preceding frame in a storage component, and wherein a respective next frame is only decoded at a time when samples of a further frame are needed.

3.   (Currently Amended) A device comprising:

    an audio decoder ~~decoding received~~<u>for receiving</u> wavetable data<u> encoded either independently or not with respect to neighborhood frames for decoding said data</u> on a frame-by-frame basis, each frame comprising at least one sample, wherein said encoded wavetable data ~~may comprise~~<u>comprises</u> samples in an attack section and samples in a loop

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section, which samples of said loop section ~~may be reused~~are reuseable for a playback in a loop as often as required;

a storage component for saving an internal state of said audio decoder wherein interdependence between neighborhood frames is reflected together with other control information in a number of variables that constitute said internal state of said audio decoder; and

a controller, which controller causes said audio decoder to save ~~an~~said internal state of said audio decoder into said storage component before decoding a next frame, if said next frame includes a start of a loop section, which controller causes said audio decoder to decode subsequently all frames comprising samples of said loop section and to provide said decoded frames for further processing for a playback, and which controller causes said audio decoder as often as required to restore said internal state saved in said storage component and to repeat decoding subsequently all frames comprising said samples of said loop section.

4.   (Original) The device according to claim 3, further comprising a second storage component for storing the respective last decoded frame provided by said audio decoder and for providing samples of a respectively stored frame for further processing for a playback.

5.   (Currently Amended) A wavetable based sound synthesis system comprising:
        ~~a first storage component for storing encoded wavetable data;~~
        an audio encoder for encoding ~~a~~wavetable data on a frame-by-frame basis either independently or not with respect to neighborhood frames and for ~~storing~~providing resulting encoded wavetable data ~~in said first storage component~~;
        an audio decoder decoding wavetable data provided by said first storage component on a frame-by-frame basis, each frame comprising at least one sample, wherein said encoded wavetable data ~~may comprise~~comprises samples in an attack section and samples in a loop section, which samples of said loop section ~~may be reused~~are reuseable for a playback in a loop as often as required;
        a second storage component for saving an internal state of said audio decoder wherein interdependence between neighborhood frames is reflected together with other

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control information in a number of variables that constitute said internal state of said audio decoder; and

a controller, which controller causes said audio decoder to save ~~an~~said internal state of said audio decoder into said second storage component before decoding a next frame, if said next frame includes a start of a loop section, which controller causes said audio decoder to decode subsequently all frames comprising samples of said loop section and to provide said decoded frames for further processing for a playback, and which controller causes said audio decoder as often as required to restore said internal state saved in said storage component and to repeat decoding subsequently all frames comprising said samples of said loop section.

6. (Currently Amended) A software program product in which a software code for supporting a wavetable based sound synthesis is stored, for which wavetable based sound synthesis encoded wavetable data is decoded by means of an audio decoder on a frame-by-frame basis, said encoded wavetable data encoded either independently or not with respect to neighborhood frames, each frame comprising at least one sample, wherein said encoded wavetable data ~~may comprise~~comprises samples in an attack section and samples in a loop section, which samples of said loop section ~~may be reused~~are reuseable for a playback in a loop as often as required, said software code realizing the following ~~steps~~when running in a processing component which is connected to said audio decoder:

causing said audio decoder to save an internal state of said audio decoder before decoding a next frame, if said next frame includes a start of a loop section wherein interdependence between neighborhood frames is reflected together with other control information in a number of variables that constitute said internal state of said audio decoder;

causing said audio decoder to decode subsequently all frames comprising samples of said loop section and to provide said decoded frames for further processing for a playback; and

causing said audio decoder as often as required to restore said saved internal state and to repeat decoding subsequently all frames comprising said samples of said loop section.

7.   (Original) A method for use in a wavetable based sound synthesis for which wavetable data is encoded for storage by means of an audio encoder on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data comprises samples in an attack section and samples in a loop section, which samples of said loop section may be reused for a playback in a loop as often as required, said method comprising:

distributing, in this order, a certain number of padding samples, said samples of said attack section and said samples of said loop section to a sequences of frames, wherein said certain number of padding samples is selected such that all samples of said loop section are included in a single frame in case said loop section comprises less samples than a respective frame; and

encoding said sequence of frames.

8.   (Original) A device including an audio encoder for encoding received wavetable data on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data may comprise samples in an attack section and samples in a loop section and wherein samples of such a loop section may be reused for a playback in a loop as often as required, said audio encoder comprising:

a distributing component distributing, in this order, a certain number of padding samples, samples of an attack section of received wavetable data and samples of a loop section of received wavetable data to a sequences of frames, in case said received wavetable data includes an attack section and a loop section, said distributing component selecting said certain number of padding samples such that all samples of said loop section are included in a single frame in case said loop section comprises less samples than a respective frame; and

an encoding component for encoding a sequence of frames provided by said distributing component.

9.   (Original) A wavetable based sound synthesis system comprising:

a storage component for storing encoded wavetable data;

an audio encoder for encoding received wavetable data on a frame-by-frame basis and for storing resulting wavetable data in said first storage component, each frame comprising more than one sample, wherein said wavetable data may comprise samples in

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an attack section and samples in a loop section and wherein samples of such a loop section may be reused for a playback in a loop as often as required, which audio encoder includes a distributing component distributing, in this order, a certain number of padding samples, samples of an attack section of received wavetable data and samples of a loop section of received wavetable data to a sequences of frames, in case said received wavetable data includes an attack section and a loop section, said distributing component selecting said certain number of padding samples such that all samples of said loop section are included in a single frame in case said loop section comprises less samples than a respective frame, and which audio encoder includes an encoding component for encoding a sequence of frames provided by said distributing component; and

an audio decoder decoding wavetable data received from said storage component on a frame-by-frame basis and providing decoded wavetable data for further processing for a playback.

10. (Original) A software program product in which a software code for supporting a wavetable based sound synthesis is stored, for which wavetable based sound synthesis received wavetable data is encoded for storage by means of an audio encoder on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data may comprise samples in an attack section and samples in a loop section, and wherein samples of such a loop section may be reused for a playback in a loop as often as required, said software code realizing the following steps when running in a processing component of said audio encoder:

distributing, in this order, a certain number of padding samples, samples of an attack section of received wavetable data and samples of a loop section of received wavetable data to a sequences of frames, in case said received wavetable data includes an attack section and a loop section, said distributing component selecting said certain number of padding samples such that all samples of said loop section are included in a single frame in case said loop section comprises less samples than a respective frame; and

providing said sequence of frames to an encoding component of said audio encoder for encoding.

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11. (Original) A method for use in a wavetable based sound synthesis for which wavetable data is encoded for storage by means of an audio encoder on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data comprises samples in an attack section and samples in a loop section, which samples in said loop section may be reused for a playback in a loop as often as required, said method comprising:

   distributing said samples of said wavetable data to a sequences of frames;

   extending said loop section periodically in order to fill up a last frame of said sequence of frames with the resulting samples; and

   encoding said sequence of frames.

12. (Original) The method of claim 11, wherein for encoding a specific frame said audio encoder uses samples from a window exceeding said specific frame, and wherein said loop section is extended periodically to obtain more samples than required for filling up said last frame, thereby providing samples for encoding said last frame based on samples from a window exceeding said last frame.

13. (Original) A device including an audio encoder for encoding received wavetable data on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data may comprise samples in an attack section and samples in a loop section and wherein samples of such a loop section may be reused for a playback in a loop as often as required, said audio encoder comprising:

   a distributing component distributing samples of received wavetable data to a sequences of frames and, in case said received wavetable data comprises a loop section, extending said loop section periodically in order to fill up a last frame of said sequence of frames with the resulting samples; and

   an encoding component for encoding a sequence of frames provided by said distributing component.

14. (Original) A wavetable based sound synthesis system comprising:

   a storage component for storing encoded wavetable data;

   an audio encoder for encoding received wavetable data on a frame-by-frame basis and for storing resulting wavetable data in said first storage component, each frame

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comprising more than one sample, wherein said wavetable data may comprise samples in an attack section and samples in a loop section and wherein samples of such a loop section may be reused for a playback in a loop as often as required, which audio encoder includes a distributing component distributing samples of received wavetable data to a sequences of frames and, in case said received wavetable data comprises a loop section, extending said loop section periodically in order to fill up a last frame of said sequence of frames with the resulting samples, and which audio encoder includes an encoding component for encoding a sequence of frames provided by said distributing component; and

an audio decoder decoding wavetable data received from said storage component on a frame-by-frame basis and providing decoded wavetable data for further processing for a playback.

15. (Original) A software program product in which a software code for supporting a wavetable based sound synthesis is stored, for which wavetable based sound synthesis received wavetable data is encoded for storage by means of an audio encoder on a frame-by-frame basis, each frame comprising more than one sample, wherein said wavetable data may comprise samples in an attack section and samples in a loop section, and wherein samples of such a loop section may be reused for a playback in a loop as often as required, said software code realizing the following steps when running in a processing component of said audio encoder:

distributing samples of received wavetable data to a sequences of frames;

in case said received wavetable data comprises a loop section, extending said loop section periodically in order to fill up a last frame of said sequence of frames with the resulting samples; and

providing said sequence of frames to an encoding component of said audio encoder for encoding.